## **DIRECTIONS**

On Rte. 9/202, take the exit for Hillsborough and Fox State Forest. From the lights in the center of Hillsborough, take Center Road northwest about 2 miles to the parking lot on the right at the headquarters of the Fox State Forest Research Station. The trailhead is just across the street.



The Ridge Trail, which is the main footpath around the forest, is marked with red blazes on a white background.

## PROPERTY-USE GUIDELINES

This property is open to the public for recreation and education. Please, for the protection of the area and its inhabitants, and for everyone's enjoyment:

- TRAILS ARE FOR MULTIPLE-USE. PLEASE SHARE WITH CARE.
- NO MOTORIZED WHEELED VEHICLES ON TRAILS.
- RESPECT THE PRIVATE PROPERTY OF ADJACENT LANDOWNERS.
- CARRY OUT ALL TRASH.
- PRACTICE LOW-IMPACT HIKING; TREAD LIGHTLY AND PLEASE DON'T PICK PLANTS OR FLOWERS.
- NO CAMPING OR OPEN FIRES ARE ALLOWED.

# ABOUT FOX STATE FOREST

Fox State Forest is the State of New Hampshire's forestry research station. It is operated by the Forest Management Bureau, part of the NH Division of Forests & Lands in the Department of Resources & Economic Development. There are 22 miles of trails on nearly 1,500 acres of forest. Brochures and trail maps for the entire property are available at the site.

The NH Division of Forests & Lands protects and promotes the values provided by trees, forests, and related resources in the state of NH.

The New Hampshire Natural Heritage Bureau is a public/private partnership between the State of NH and The Nature Conservancy that finds, tracks, and facilitates the protection of the state's natural heritage, including rare and endangered plants and animals, exemplary natural communities, and exemplary natural community systems.

## ABOUT BLACK GUM SWAMPS

Black gum swamps are a rare wetland type in New England. They contain the highest concentration of black gum trees in the region. In New Hampshire, they are primarily found below 1000 ft. elevation in central and southern parts of the state.

Black gum (*Nyssa sylvatica*) trees, also called black tupelo, are uncommon in New Hampshire, where they are at the northern edge of their range in North America. They are the oldest known living hardwoods, and are the oldest trees (nearly 700 years old) of any kind in New England.

The stag-headed upper trunks of old black gum trees are the result of repeated breakage of brittle limbs, which easily give way under heavy winds and ice loads. While the crown becomes a gnarled jumble of remaining branches, the strong trunks are left intact and the tree survives. The species is clonal, meaning trees close together may share the same root system and actually be the same genetic individual. The combination of an extensive clonal root system and brittle branches may have provided black gum trees with the right formula to withstand centuries of hurricanes and ice-storms.

This brochure was created by the NH Natural Heritage Bureau as part of a series designed to educate the public about the state's special plants and natural communities. For more trail brochures, please visit us on the web at: http://nh.gov/dred/divisions/forestandlands/bureaus/naturalheritage/Guides.htm



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# NH NATURAL HERITAGE BUREAU

# VISITING NEW HAMPSHIRE'S BIODIVERSITY

# FOX STATE FOREST BLACK GUM SWAMP



a property managed by
New Hampshire Department of
Resources & Economic Development
Division of Forests & Lands



This brochure paid for with funds from the NH Conservation License Plate www.mooseplate.com



## TRAIL DESCRIPTION:

At Fox State Forest, several different natural and managed vegetation communities can be viewed along the trail to the black gum swamp.

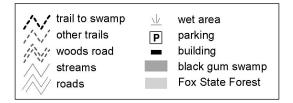
The beginning of the trail gently descends from the road and you quickly come to a sharp right turn (1). This area is a red pine plantation (2): look for distinct rows of trees here. At a fallen-over tree, the trail turns sharply left (3). Go through a break in an old stone wall (4) and bear slightly left. The forest transitions to a stand of white pine, red oak, and hemlock. Several glacial erratic boulders dot the ground in the woods on either side of the trail. Cross over a log bridge and arrive at a stand of hemlock and white pine (5). At the junction with Hurricane Road (6), go left on the road a short distance, then veer right off the road onto Ridge Trail. At the next junction (7), bear right and down the hill on the Swamp Trail. The upland woods here are composed mostly of a mix of hemlock, birch, and white pine trees. Many small, young trees indicate healthy regeneration of the forest. Pass the junction with the White Cross Trail on the right and continue straight to the eastern edge of the black gum - red maple basin swamp.

The ground in the swamp itself (8) has a thick layer of peat moss and is saturated year-round. The tree canopy in the swamp is dominated by red maple and black gum trees. There is also a very thick shrub layer with lots of mountain holly, highbush blueberry, and winterberry. The winterberry plants produce bright red berries in fall that provide an excellent food source for birds. The herbaceous plant layer is mostly composed of several trailing evergreen species such as partridgeberry and wintergreen, as well as others such as bunchberry, cinnamon fern, and several sedges.

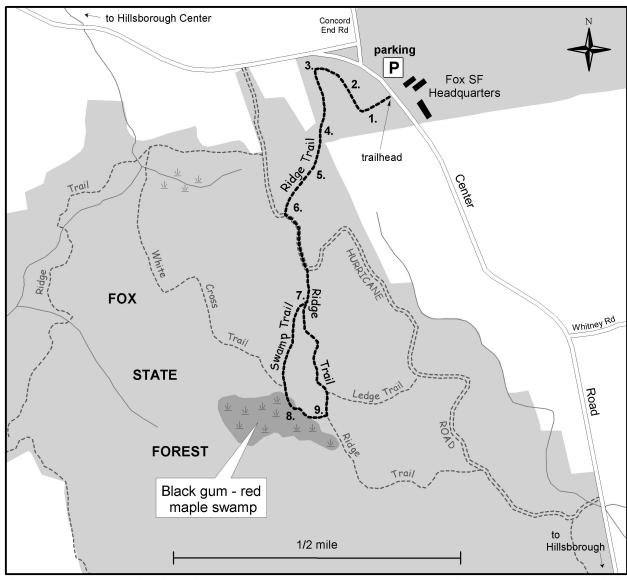
The black gum trees, several of which are visible from the trail, have blocky, deeply furrowed bark ridges and characteristic, stag-headed upper trunks. These trees are very old (over 400 years). Several dead trees that are still standing (snags) provide good habitat for small animals and birds.

To return, either walk back the way you've just come, or make a short loop by continuing on to the Ridge Trail again (9), and turning left up the hill.

**TRAIL NOTES:** This trail travels over moderate terrain, with some hills. The footing varies from dirt path to rocks to roots to wooden bridges. Please wear appropriate footwear. The roundtrip distance is about 2 miles and takes about an hour to complete.



# TRAIL MAP



Numbers on map are described in the trail description

Map and photo by Ben Kimball, January 2003.